# OHIO PUBLIC WORKS COMMISSION

77 South High Street, Room 1629
Columbus, Ohio 43266-0303
(614) 466-0880

CB223

# APPLICATION FOR FINANCIAL ASSISTANCE

NOTE: Applicant should consult the "Instructions for Completion of Project Application" for assistance in the proper completion of this form.

APPLICANT NAME: City of Sharonville
STREET: 10900 Reading Road

CITY/ZIP: Sharonville, Ohio 45241

PROJECT NAME: Kemper Road Bridge Replacement (East of Mosteller)
PROJECT TYPE: Bridge
TOTAL COST: $ 282,700

DISTRICT NUMBER: 2
COUNTY: Hamilton

PROJECT LOCATION ZIP CODE: 45241

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This section to be completed by District Committee ONLY:

## DISTRICT FUNDING RECOMMENDATION

AMOUNT OF REQUEST: $ 195,600.00

FUNDING SOURCE (Check Only One):

- [X] State Issue 2 District Allocation
- [ ] State Issue 2 Small Government Funds
- [ ] State Issue 2 Emergency Funds
- [ ] Local Transportation Improvement Program

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This section to be completed by OPWC ONLY:

OPWC PROJECT NUMBER: _____

OPWC FUNDING AMOUNT: $ _____

# 1.0 APPLICANT INFORMATION

| | | |
|---|---|---|
| 1.1 | CONTACT PERSON | Mr. Rex E. Baysore |
| | TITLE | Safety - Service Director |
| | STREET | 10900 Reading Road |
| | CITY/ZIP | Sharonville, Ohio 45241 |
| | PHONE | ( 513 ) 563 - 1144 |
| | FAX | ( 513 ) 563 - 0617 |
| 1.2 | CHIEF EXECUTIVE OFFICER | Hon. John S. Dowlin |
| | TITLE | Mayor |
| | STREET | 10900 Reading Road |
| | CITY/ZIP | Sharonville, Ohio 45241 |
| | PHONE | ( 513 ) 563 - 1144 |
| | FAX | ( 513 ) 563 - 0617 |
| 1.3 | CHIEF FINANCIAL OFFICER | Mr. James D. Greensfelder |
| | TITLE | Auditor |
| | STREET | 10900 Reading Road |
| | CITY/ZIP | Sharonville, Ohio 45241 |
| | PHONE | ( 513 ) 563 - 1144 |
| | FAX | ( 513 ) 563 - 0617 |
| 1.4 | PROJECT MGR | Mr. Al Ledbetter |
| | TITLE | Deputy Safety - Service Director |
| | STREET | 10900 Reading Road |
| | CITY/ZIP | Sharonville, Ohio 45241 |
| | PHONE | ( 513 ) 563 - 1144 |
| | FAX | ( 513 ) 563 - 0617 |
| 1.5 | DISTRICT LIAISON | William W. Brayshaw |
| | TITLE | Chief Deputy County Engineer |
| | STREET | 138 E. Court Street<br>700 County Administration Bldg. |
| | CITY/ZIP | Cincinnati, Ohio 45202 |
| | PHONE | ( 513 ) 632 - 8691 |
| | FAX | ( 513 ) 723 - 9748 |

# 2.0 PROJECT SCHEDULE

| | | ESTIMATED START DATE | ESTIMATED COMPLETE DATE |
|---|---|---|---|
| 2.1 | ENGR. DESIGN | 04 / 02 / 90 | 06 / 25 / 90* |
| 2.2 | BID PROCESS | 06 / 26 / 90 | 07 / 24 / 90 |
| 2.3 | CONSTRUCTION | 08 / 01 / 90 | 10 / 31 / 90 |

*Assumes County review of preliminary and final plans at one (1) week each.

# 3.0 PROJECT INFORMATION

3.1 PROJECT NAME: Kemper Road Bridge Replacement - East of Mosteller

3.2 BRIEF PROJECT DESCRIPTION

A. SPECIFIC LOCATION:

On Kemper Road, over a tributary to the East Fork of the Mill Creek, Approximately 200' east of Mosteller Road.

See Location Map.

B. PROJECT COMPONENTS:

Replace existing concrete box/corrugated metal arch structure with 3-sided pre-cast concrete bridge. Wingwalls/headwalls at each end of new bridge with 100'± retaining wall on south end. Regrade 200' of outletting channel; line 50' of outlet channel with concrete. Utility relocations/adjustments as required. Remove existing structure, backfill and repave.

C. PHYSICAL DIMENSIONS/CHARACTERISTICS:

Existing Bridge: 6'-8" x 16'-6" concrete box culvert (original structure) with 5'x18" corrugated metal arch extension. Overall length 50'.

Proposed Bridge: 3-sided pre-cast concrete; 6' rise x 26' span x 65' long. New bridge will be about 100' west of existing bridge to avoid conflict with truck apron at adjacent industry and to provide better channel alignment. Roadway is wider at this location.

Proposed Channel: 14'+ wide bottom; 2:1 side slopes; 4'-6" deep; length=200' (1st 50' to be concrete lined).

D. DESIGN SERVICE CAPACITY:

Design Live Load: Existing Bridge; N-A
Proposed Bridge; Standard AASHTO HS 20-44 (tractor truck with semi-trailer)
Hydraulic Capacity:
Existing Culvert: 500 CFS±
Proposed Culvert: 1300 CFS± (50 year frequency storm);
Tributary Area: 1845 Acres (2.9 sq. miles)

3.3 REQUIRED SUPPORTING DOCUMENTATION

Attach Pages.

# 4.0 PROJECT FINANCIAL INFORMATION

## 4.1 PROJECT ESTIMATED COSTS (Round to Nearest Dollar):

| | | | |
|---|---|---|---|
| a) | Project Engineering Costs: | | |
| | 1. Preliminary Engineering | $ 14,700 | (including Geotech. & Survey) |
| | 2. Final Design | $ 14,500 | |
| | 3. Construction Supervision | $ 9,000 | (Including Stakeout) |
| b) | Acquisition Expenses | | |
| | 1. Land | $ N-A | |
| | 2. Right-of-Way | $ N-A | |
| c) | Construction Costs | $ 203,800 | |
| d) | Equipment Costs | $ N-A | |
| e) | Other Direct Expenses | $ N-A | |
| f) | Contingencies | $ 40,700 | |
| g) | **TOTAL ESTIMATED COSTS** | $ 282,700 | |

## 4.2 TOTAL PORTION OF PROJECT REPAIR/REPLACEMENT

$ 282,700

## 4.3 TOTAL PORTION OF PROJECT NEW/EXPANSION

$ - 0 -

## 4.4 PROJECT FINANCIAL RESOURCES (Round to Nearest Dollar and Percent)

| | | Dollars | % |
|---|---|---|---|
| a) | Local In-Kind Contributions | $ | |
| b) | Local Public Revenues | $ 87,100 | 31% |
| c) | Local Private Revenues | $ | |
| d) | Other Public Revenues | | |
| | 1. State of Ohio | $ | |
| | 2. Federal Programs | $ | |
| e) | OPWC Funds | $ 195,600 | 69% |
| f) | **TOTAL FINANCIAL RESOURCES** | $ 282,700 | 100% |

## 4.5 STATUS OF FUNDS

Attach Documentation.

## 4.6 PREPAID ITEMS

Attach Page.

# 5.0 APPLICANT CERTIFICATION

## The Applicant Certifies That:

As the official representative of the Applicant, the undersigned certifies: that he/she is legally empowered to represent the applicant in both requesting and accepting financial assistance as provided under Chapter 164 of the Ohio Revised Code; that to the best of his/her knowledge and belief, all representations that are a part of this application are true and correct; that all official documents and commitments of the applicant that are a part of this application have been duly authorized by the governing body of the Applicant; and, should the requested financial assistance be provided, that in the execution of this project, the Applicant will comply with all assurances required by Ohio law, including those involving minority business utilization, equal employment opportunity, Buy Ohio, and prevailing wages.

Rex E. Baysore - Safety - Service Director

Certifying Representative (Type Name and Title)

3/13/90

Signature/Date Signed

Applicant shall circle the appropriate response to the statements.
In my project application, I have included the following:

| | | | |
|---|---|---|---|
| YES | NO | | Two-year Maintenance of Local Effort Report as required in 164-1-12 of the Ohio Administrative Code. |
| YES | NO | | A registered professional engineer's estimate of useful life as required in 164-1-13 of the Ohio Administrative Code. |
| YES | NO | | A registered professional engineer's estimate of cost as required in 164-1-14 and 164-1-16 of the Ohio Administrative Code. |
| YES | NO | | Two (2) copies of a 5-year Capital Improvements Report have been submitted to my District Integrating Committee as required in 164-1-31 of the Ohio Administrative Code. |
| YES | NO | | A "status of funds" report per section 4.5 of this application. |
| YES | NO | N/A | A copy of the cooperative agreement (for projects involving more than one subdivision). |
| YES | NO | N/A | Copies of all warrants for those items identified as "pre-paid" in section 4.6 of this application. |

# 6.0 DISTRICT COMMITTEE CERTIFICATION

## The District Integrating Committee for District Number 2 Certifies That:

As the official representative of the District Public Works Integrating Committee, the undersigned hereby certifies: that this application for financial assistance as provided under Chapter 164 of the Ohio Revised Code has been duly selected by the appropriate body of the District Public Works Integrating Committee; that the project's selection was based entirely on an objective, District-oriented set of project evaluation criteria and selection methodology that are fully reflective of and in conformance with Ohio Revised Code Sections 164.05, 164.06, and 164.14, and Chapter 164-1 of the Ohio Administrative Code; and that the amount of financial assistance hereby recommended has been prudently derived in consideration of all other financial resources available to the project. As evidence of the District's due consideration of required project evaluation criteria, the results of this project's ratings under such criteria are attached to this application.

Donald C. Schramm, Chairperson, District #2 Integrating Committee

Certifying Representative (Type Name and Title)

3/16/90

Signature/Date Signed

CITY OF SHARONVILLE
2 YEAR MAINTENANCE OF LOCAL EFFORT

| YEAR | PROJECT | FUNDING SOURCE LOCAL | MDF | C.D. | ISSUE II | AMOUNT |
|---|---|---|---|---|---|---|
| 1988 | Engineering - Infrastructure Projects | X | | | | 125,000 |
| 1988 | Street Program | X | | | | 535,000 |
| 1988 | Hauck Road upgrade | X | | | | 98,000 |
| 1988 | Clinton Avenue storm sewer | X | | | | 25,000 |
| 1988 | U.S. Rt. 42 Improvement | X | X | | | 190,000 |
| 1988 | Traffic signals and school lights | X | | | | 6,200 |
| 1988 | Development of Left Turn on Chester | X | | | | 70,000 |
| 1988 | Brick repairs - Downtown | X | | | | 4,500 |
| 1988 | Sidewalk repairs | X | | | | 65,000 |
| | | TOTAL | | | | $1,118,700 |

| EAR | PROJECT | FUNDING SOURCE LOCAL | MDF | C.D. | ISSUE II | AMOUNT |
|---|---|---|---|---|---|---|
| 989 | Engineering - Infrastructure Projects | X | | | | 300,000 |
| 989 | Street Program | X | | | | 445,693 |
| 989 | Canal Road | X | | | | 457,354 |
| 989 | Sidewalk Repairs | X | | | | 225,000 |
| 989 | Reed Hartman Highway | X | X | | | 152,333 |
| 989 | Kemper Road Improvement | X | | | | 1,000,000 |
| | | TOTAL | | | | $2,580,380 |

PRELIMIINARY OPINION OF CONSTRUCTION COST

CDS ASSOCIATES, INC.

PROJECT Kemper Road Bridge Replacement

East of Mosteller PROJECT # 90049 DATE March 13, 1990



| Item No. | Spec. No. | ITEM | Estimated Quantity | Unit of Measure | UNIT COST Material | Labor | Total | Item Cost |
|---|---|---|---|---|---|---|---|---|
| | 201 | Clearing & Grubbing | | L.S. | | | 5,000 | 5,000 |
| | 202 | Remove Existing Structure & Concrete Channel | | L.S. | | | 8,000 | 8,000 |
| | 203 | Excavation for Culvert | 1520 | C.Y. | | | 15.00 | 22,800 |
| | 203 | Excavation for Channel Regrading | 550 | C.Y. | | | 15.00 | 8,250 |
| | 203 | Compacted Clay Fill (Old Culvert & Channel) | 585 | C.Y. | | | 20.00 | 11,700 |
| | 301 | Bituminous Aggregate Base | 80 | C.Y. | | | 60.00 | 4,800 |
| | 402 | Asphalt Leveling Course | 20 | C.Y. | | | 65.00 | 1,300 |
| | 404 | Asphalt Surface Course | 20 | C.Y. | | | 65.00 | 1,300 |
| | 503 | Cofferdams, Cribbing & Sheeting | | L.S. | | | 2,000 | 2,000 |
| | 511 | Class C Concrete, Footings | 131 | C.Y. | | | 225 | 29,475 |
| | 511 | Class C Concrete, Headwalls & Retaining Walls | 40 | C.Y. | | | 270 | 10,800 |
| | 518 | Porous Backfill | 113 | C.Y. | | | 23.00 | 2,599 |
| | 601 | Concrete Channel Lining | 50 | C.Y. | | | 240 | 12,000 |
| | 601 | Rock Channel Protection | 70 | C.Y. | | | 30.00 | 2,100 |

CDS ASSOCIATES, INC.

PROJECT Kemper Road Bridge Replacement

East of Mosteller PROJECT # 90049 DATE March 13, 1990



| Item No. | Spec. No. | ITEM | Estimated Quantity | Unit of Measure | UNIT COST Material | Labor | Total | Item Cost |
|---|---|---|---|---|---|---|---|---|
| | 603 | Pre-Cast Concrete 3-sided Bridge; | | | | | | |
| | | 8' Rise (with 2' Bury) x 26' Span with 30° skew | 65 | L.F. | | | 960 | 62,400 |
| | 606 | Guardrail - On Bridge | 60 | L.F. | | | 25 | 1,500 |
| | 606 | Guardrail - on Approach | 200 | L.F. | | | 18 | 3,600 |
| | 614 | Maintaining Traffic | | L.S. | | | | 10,000 |
| | 659 | Seed & Mulch | 2800 | S.Y. | | | 1.50 | 4,200 |
| | | CONTINGENCIES (20%±) | | | | | | 40,676 |
| | | TOTAL CONSTRUCTION COST | | | | | | 244,500 |

OPINION OF CONSTRUCTION COST IS SUBJECT TO ADJUSTMENT UPON DETAIL PLAN COMPLETION AND UPON RECEIPT OF BIDS BY QUALIFIED CONTRACTORS.

USEFUL LIFE - UPON SATISFACTORY COMPLETION OF WORK, THE USEFUL LIFE OF THE KEMPER ROAD BRIDGE REPLACEMENT WILL BE 50 YEARS.

BY CDS ASSOCIATES, INC. - CITY ENGINEER

Mark A. Kluesener

Mark A. Kluesener, P.E.

DISTRICT 2

PROPOSED 5 YEAR CAPITAL IMPROVEMENT PROGRAM

(ISSUE 2 FUNDS ONLY)

FORM 1 - 10-10-89

CITY OF SHARONVILLE

NAME OF JURISDICTION/AGENCY

IDENTIFICATION CODE SHA

(See attachment 5)

TYPE PROJECT

1. BRIDGE
   F.O.-FUNCTIONALLY OBSOLETE
   S.D.-STRUCTURALLY DEFICIENT
2. ROADWAY
3. STORM WATER
4. WASTE WATER
5. WATER SUPPLY
6. SOLID WASTE DISPOSAL
7. FLOOD CONTROL

TYPE PROJECT (SUFFIX)

A - REHABILITATION

B - REPLACEMENT

C - BETTERMENT

| PROJ. NO. (FOR STAFF USE) | PRIORITY | PROJECT NAME | TYPE PROJ | PROJECT LOCATION, LIMITS OR BRIDGE NO. | CURRENT CONDITION (FOR BRIDGES USE F.O. OR S.D.) | DAILY USERS (DAILY TRAFFIC X 1.2) | TOTAL PROJECT COST INCLUDING P.E. AND R/W | ESTIMATED CONST. COST | INFRASTRUCTURE FUNDS: IS CONST. FUNDED IN OVERALL 5 YEAR CAPITAL IMPROVEMT | INFRASTRUCTURE FUNDS: CAN PROJ. BE BID, EARLIER WITH ISSUE 2 FUNDS | INFRASTRUCTURE FUNDS: AMOUNT OF ISSUE 2 FUNDS NEEDED AS % OF |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FUNDING YEAR 1990 | | | | | | | | | | | |
| | 1 | Sharonville Retention Dam Spillway | 7B | Creek Road Opposite Sharondale | Class I (High Hazard) | N/A See Appl | 671,136 | 500,586 | Yes | No | 50% |
| FUNDING YEAR 1991 | | | | | | | | | | | |
| | 1 | Main Street Bridge | 1B | HAM-WYSCR-0131 SHA | 4A | 16,570 | 167,000 | 145,000 | No | Yes | 50% |
| FUNDING YEAR 1992 | | | | | | | | | | | |
| | 1 | Creek Road Bank Stabilization | 3A | North Side of Creek Road at Thornview | Poor | N/A | 94,000 | 75,000 | No | Yes | 50% |
| FUNDING YEAR 1993 | | | | | | | | | | | |
| | 1 | Kemper Road Bridge | 1B | HAM-S0266-0212 | 4A | 12,100 | 282,700 | 244,500 | No | Yes | 80% |
| FUNDING YEAR 1994 | | | | | | | | | | | |
| | 1 | Reading Rd. Bridge @ Sharon Road | 1B | HAM-00042-1431 | 5P | 13,663 | | 1,000,000 | No | Yes | 50% |

CITY OF SHARONVILLE
FIVE YEAR CAPITAL IMPROVEMENT PLAN
FOR INFRASTRUCTURE

1990

| | | |
|---|---|---|
| 1. | Street Program | $1,000,000.00 |
| 2. | Sidewalk Repairs | 65,000.00 |
| 3. | Street Lights (Indian Springs) | 80,000.00 |
| 4. | Kemper/Chester Rds. Widening and Improvements (Project began in 1989) | 1,000,000.00 |
| 5. | Repair & Overlay of Reed Hartman Highway I-275 to Fields Ertel | 300,000.00 |
| 6. | Replacement of Kemper Rd. bridge over Sharon Woods | 720,000.00 |
| 7. | Sharonville Retention Dam Spillway | 671,000.00 |
| 8. | Relocation of Traffic Signal on Chester and Sharon Rds. (2) | 30,000.00 |
| 9. | Bridge Improvements Kemper east of Mosteller | 230,000.00 |
| 10. | Sharon Rd. Improvements (Prince to Chester) | 350,000.00 |
| | TOTAL | $44,460,000.00 |

1991

| | | |
|---|---|---|
| 1. | Street Program | $1,000,000.00 |
| 2. | Sidewalk Repairs | 65,000.00 |
| 3. | Stabilization of Hazelwood Creek Bank (Creek and Thornview) | 75,000.00 |
| 4. | Land acquisition for I-275 Improvements | 500,000.00 |
| 5. | Engineering for widening and overlay of E. Kemper from Sharon Woods to I-275 | 75,000.00 |
| 6. | Main Street Bridge Replacement | 161,000.00 |
| 7. | Engineering for Replacement of St. Rt. 42 Bridge (south of Sharon Ave.) | 80,000.00 |
| | TOTAL | $1,956,000.00 |

1992

| | | |
|---|---|---|
| 1. | Street Program | $1,000,000.00 |
| 2. | Sidewalk Repairs | 70,000.00 |
| 3. | Engineering for I-275 Ramp Improvements | 80,000.00 |
| 4. | Widen & Overlay of Kemper Rd. (Sharon Woods east to Reed Hartman) | 315,000.00 |
| 5. | Replacement of St. Rt. 42 Bridge | 500,000.00 |
| 6. | Widen and overlay Reading Rd., north of Kemper Rd. | 62,000.00 |
| 7. | Engineering for improvements of Kemper Rd. from Reed Hartman to Corp. line | 80,000.00 |
| | TOTAL | $2,107,000.00 |

1993

| | | |
|---|---|---|
| 1. | Street Program | $1,200,000.00 |
| 2. | Sidewalk Repairs | 70,000.00 |
| 3. | Replacement of Oak Ave. bridge culvert | 190,000.00 |
| 4. | Improvements to E. Kemper (east of Reed Hartman to Corp. line) | 500,000.00 |
| 5. | Engineering and improvements to Hauck Rd. Reading Rd. to Rt. 42. | 1,500,000.00 |
| 6. | Engineering for widening of Mosteller Rd. Crescentville to I-275 | 90,000.00 |
| 7. | Engineering of 4 lane bridge over I-75 on Crescentville | 90,000.00 |
| 8. | Storm Drain Repairs — City Wide | 500,000.00 |
| | TOTAL | $4,140,000.00 |

1994

| | | |
|---|---|---|
| 1. | Street Program | $1,200,000.00 |
| 2. | Sidewalk Repairs | 70,000.00 |
| 3. | Widening of Mosteller Rd. (Crescentville to I-275) | 1,500,000.00 |
| 4. | Engineering and widening of Crescentville from Chesterdale to Centerdale | 900,000.00 |
| 5. | Engineering for Crescentville from I-75 to Gano Rd. | 90,000.00 |
| 6. | Storm Drain Repairs — City Wide | 500,000.00 |
| | TOTAL | $4,260,000.00 |

# City of Sharonville



March 13, 1990

STATUS OF FUNDS
REPORT

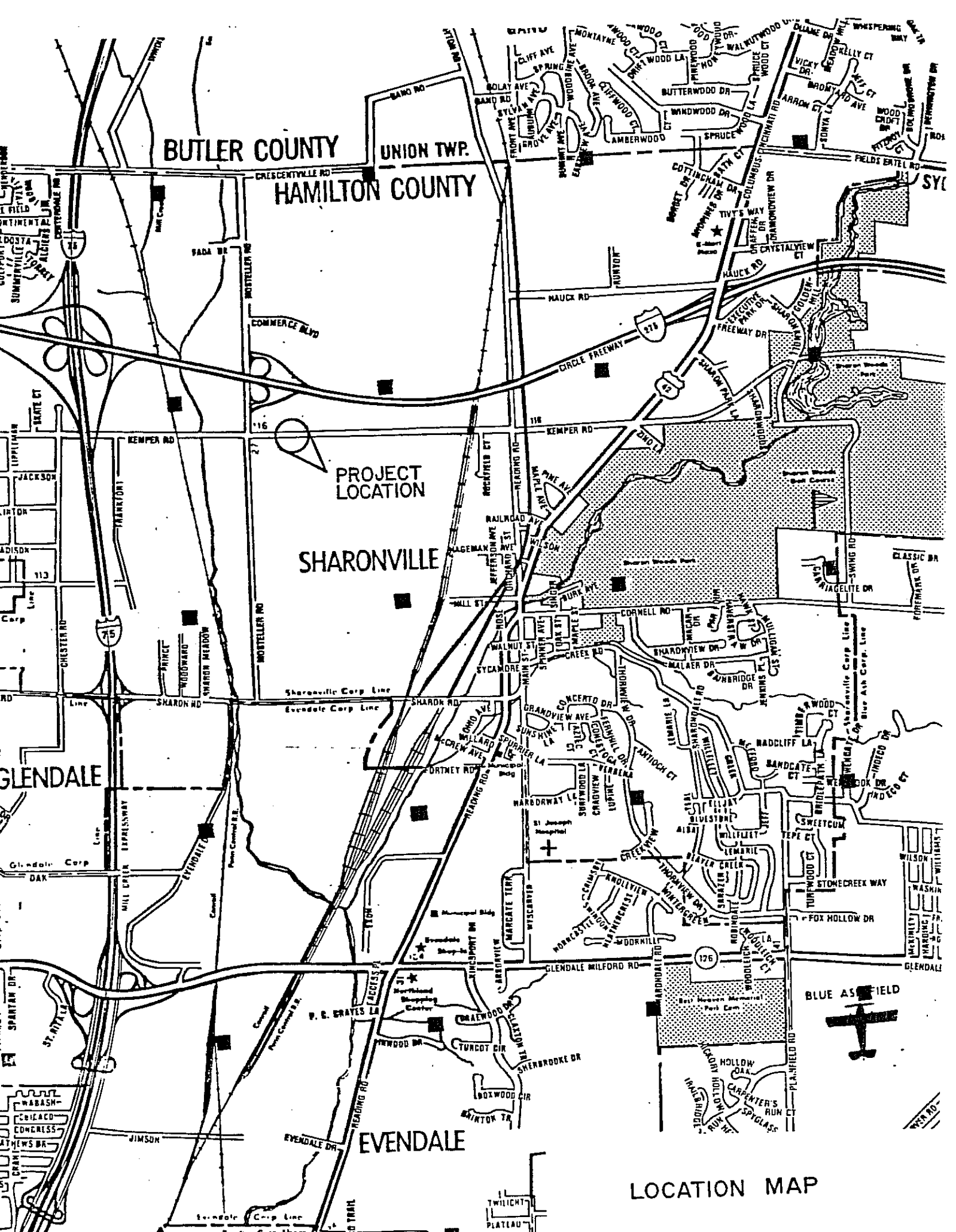
CERTIFICATION OF ISSUE II FUNDS

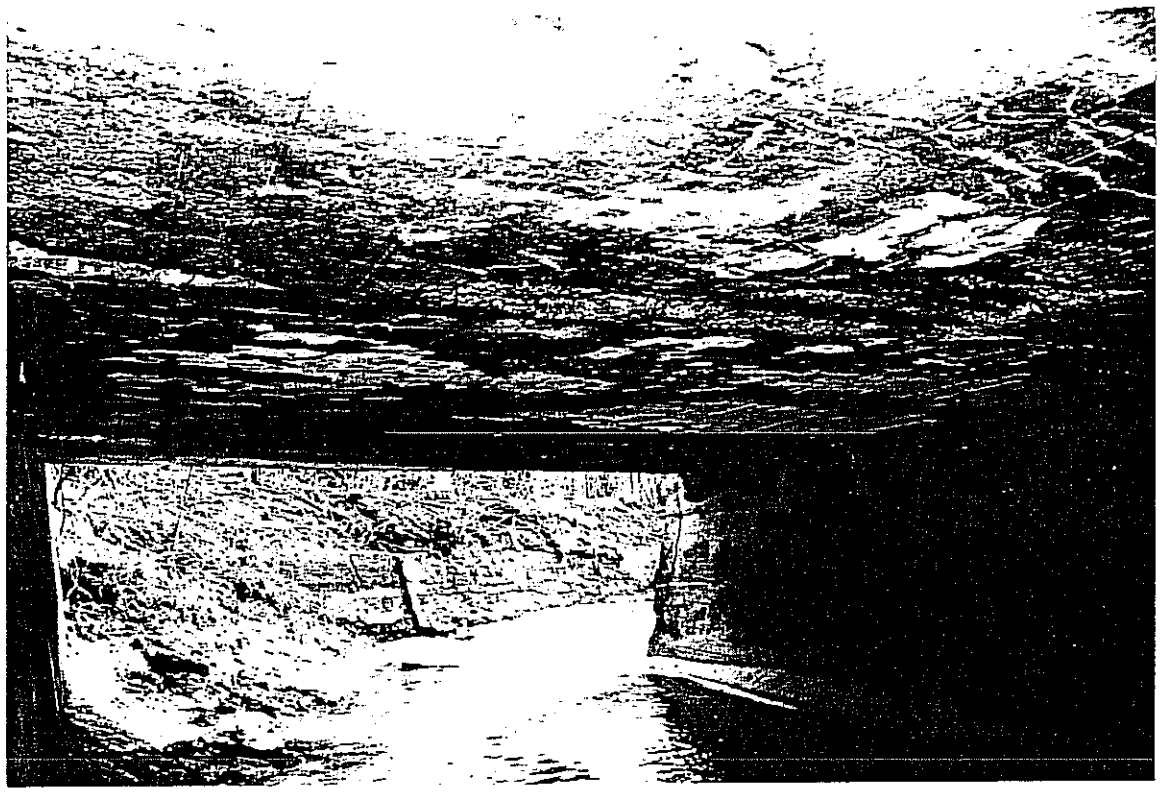
KEMPER ROAD BRIDGE REPLACEMENT

This is to certify that the funds required to initiate and complete the proposed Issue II Public Works Project will be available upon the Ohio Public Works Committee's approval of the project.

Rex E. Baysore
Safety/Service Director

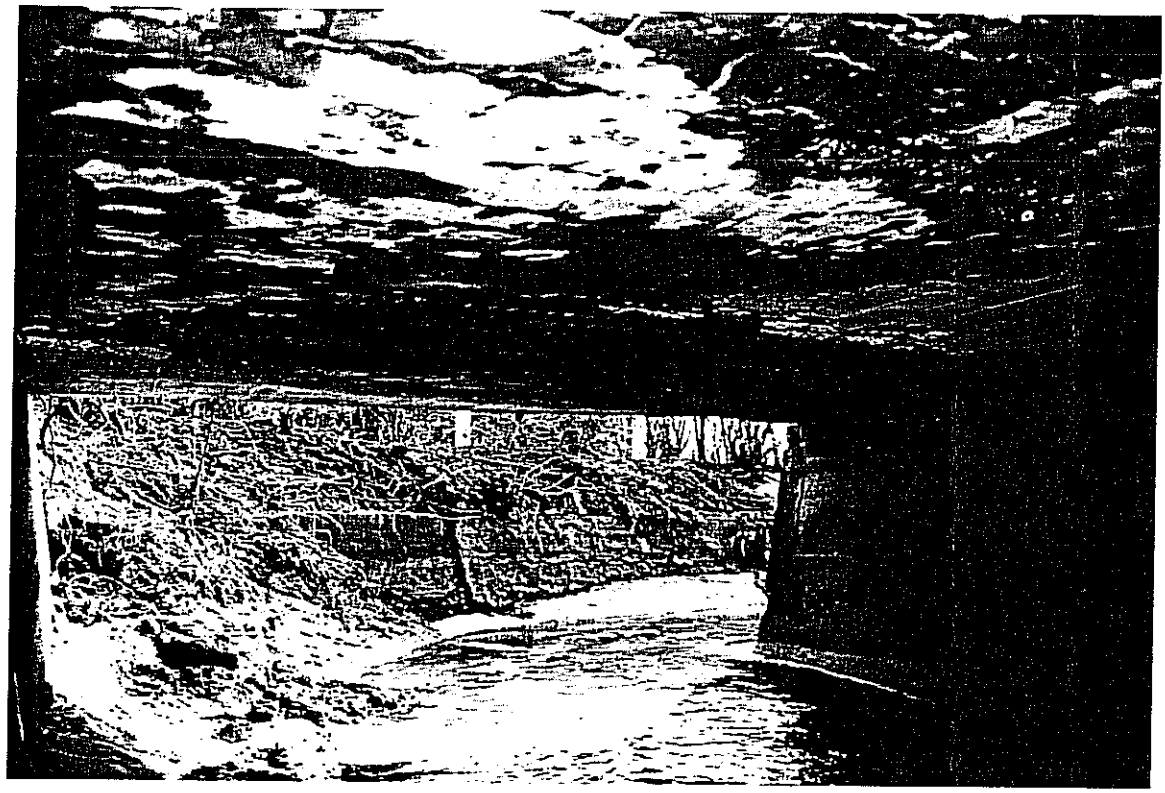
10900 READING ROAD • SHARONVILLE, OHIO 45241 • (513) 563-1144


BUTLER COUNTY
UNION TWP.
HAMILTON COUNTY
PROJECT LOCATION
SHARONVILLE
GLENDALE
EVENDALE
BLUE ASH FIELD
CRESCENTVILLE RD
SAND RD
MONTGOMERY RD
HAUCK RD
KEMPER RD
COMMERCE BLVD
CIRCLE FREEWAY
EXECUTIVE PARK DR
SHARON PARK LN
READING RD
RAILROAD AVE
MILL ST
CORNELL RD
SHARON RD
GRANDVIEW AVE
GLENDALE MILFORD RD
EVENDALE DR
JIMSON
MOSTELLER RD
CHESTER RD
FRANKFORT
WOODWARD
SHARON MEADOW
EVENDALE EXPRESSWAY
Sharonville Corp Line
Evendale Corp Line
Glendale Corp Line
LOCATION MAP

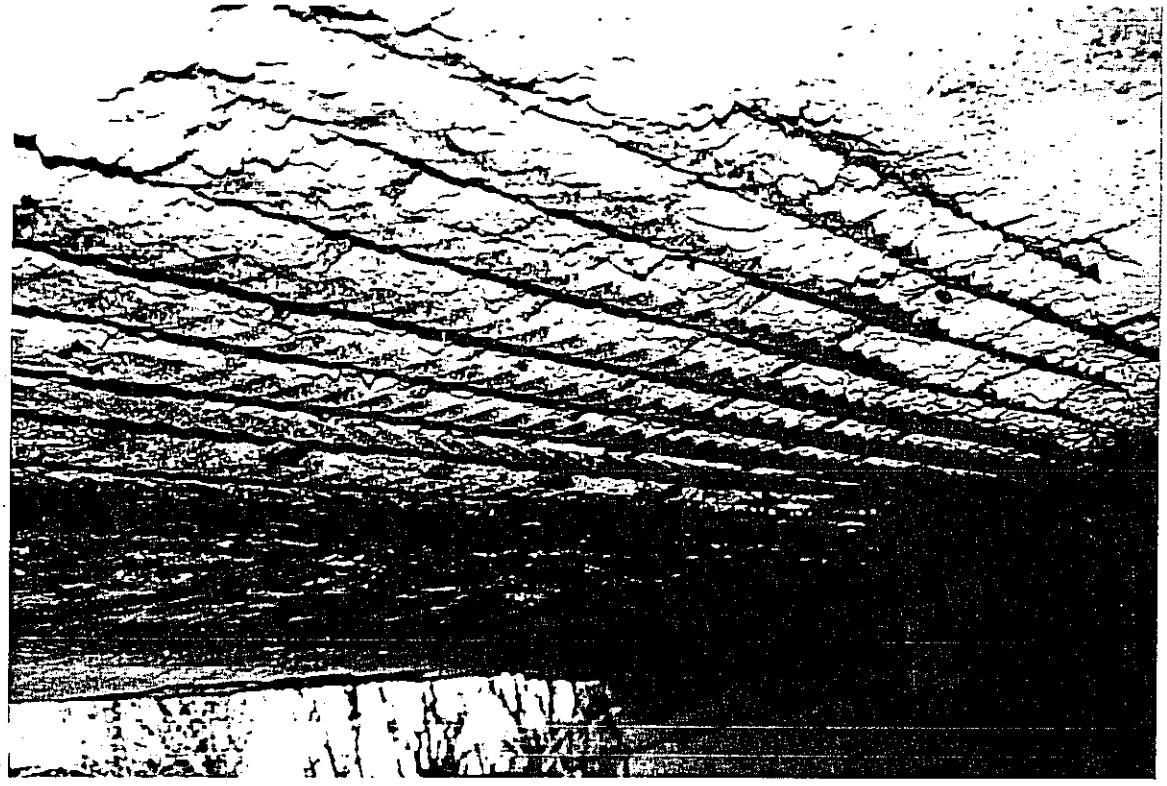


Inside of original box structure.

Corrugated metal arch extension

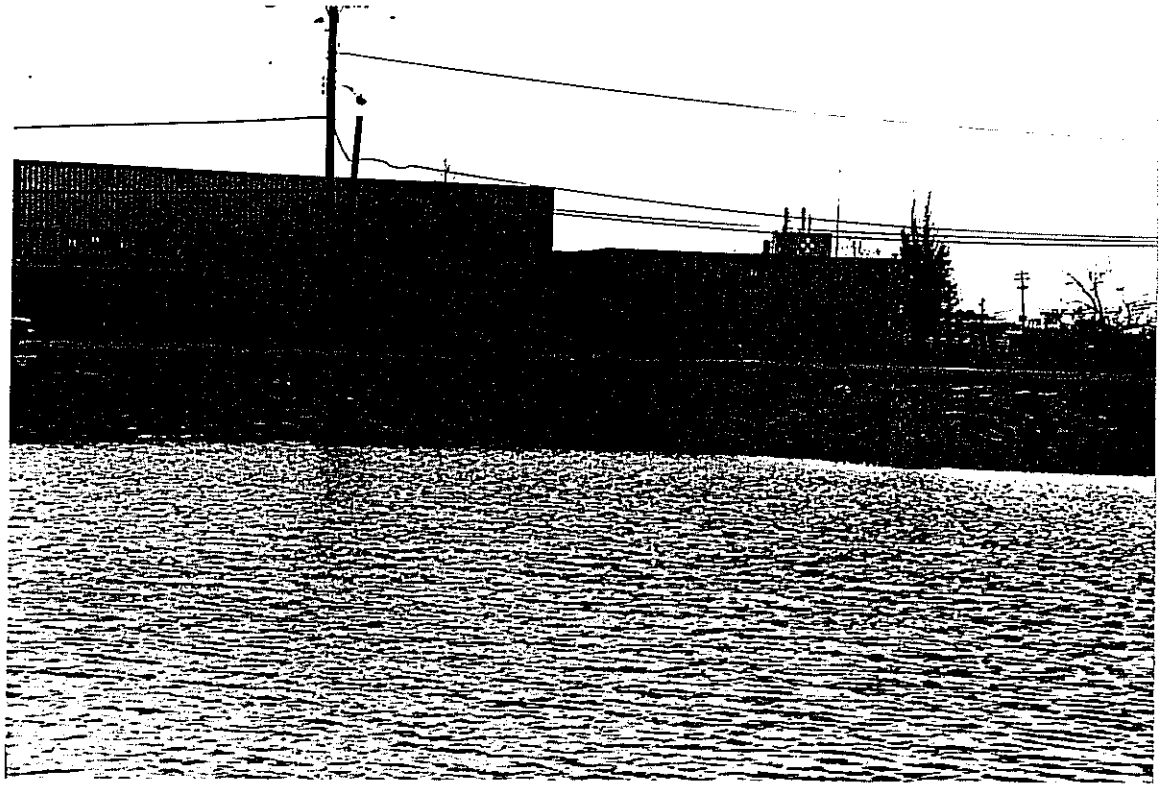


Inside of original box structure showing exposed reinforcement.



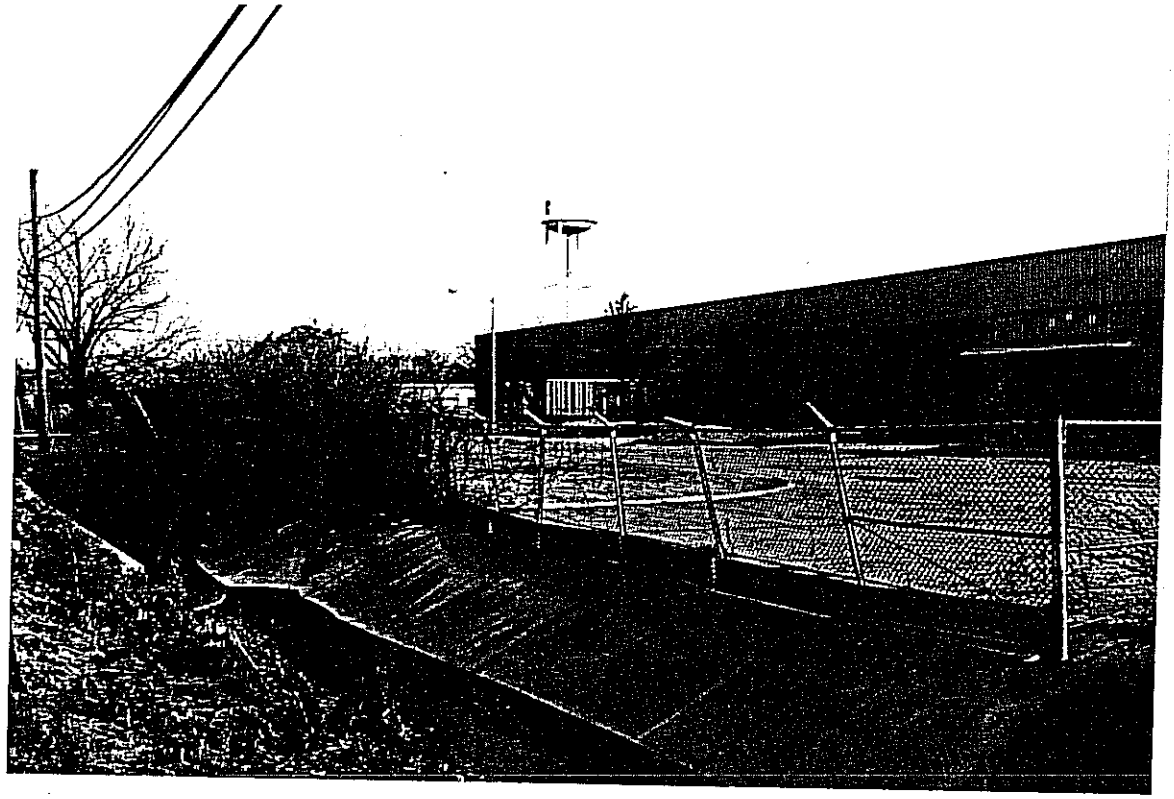
Close-up of exposed reinforcemnet.....

Note the depth of concrete spalling.



Inlet end of existing structure.


Outlet end of existing structure.



Outlet channel of existing culvert showing proximity of adjacent truck turn around.

Outlet channel looking toward Mosteller Road....
Note close proximity of Kemper Road.

CDS Associates Inc.
15 MINUTE, 2 CHANNEL VEHICLE COUNT

REFERENCE: 21 CORRECTION FACTOR: 1.00
LOCATION: EAST KEMPER ROAD (WEST OF ROCKFIELD COURT)
WEATHER: SLUNNY 85
OPERATOR: MST

FILENAME: 88052-21
TUESDAY 7 / 26 / 88

| HOUR BEGINS | WEST 0 | 15 | 30 | 45 | HOUR TOTAL | EAST 0 | 15 | 30 | 45 | HOUR TOTAL | COMBINED TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AM | | | | | | | | | | | |
| 12 | 5 | 3 | 7 | 11 | 26 | 11 | 5 | 11 | 9 | 36 | 62 |
| 1 | 9 | 1 | 4 | 4 | 18 | 8 | 7 | 4 | 2 | 21 | 39 |
| 2 | 5 | 6 | 12 | 9 | 32 | 7 | 6 | 14 | 8 | 35 | 67 |
| 3 | 2 | 4 | 11 | 9 | 26 | 4 | 5 | 3 | 5 | 17 | 43 |
| 4 | 2 | 5 | 4 | 11 | 22 | 6 | 8 | 3 | 9 | 26 | 48 |
| 5 | 12 | 10 | 6 | 7 | 35 | 18 | 11 | 13 | 21 | 63 | 98 |
| 6 | 21 | 24 | 29 | 67 | 141 | 23 | 33 | 97 | 113 | 266 | 407 |
| 7 | 85 | 95 | 99 | 128 | 407 | 64 | 72 | 81 | 129 | 346 | 753 |
| 8 | 98 | 92 | 84 | 95 | 369 | 91 | 81 | 78 | 78 | 328 | 697 |
| 9 | 74 | 90 | 84 | 87 | 335 | 58 | 55 | 77 | 65 | 255 | 590 |
| 10 | 88 | 91 | 104 | 121 | 404 | 77 | 75 | 71 | 90 | 313 | 717 |
| 11 | 100 | 96 | 118 | 103 | 417 | 101 | 86 | 103 | 112 | 402 | 819 |
| PM | | | | | | | | | | | |
| 12 | 130 | 136 | 136 | 125 | 527 | 114 | 118 | 101 | 104 | 437 | 964 |
| 1 | 106 | 106 | 92 | 102 | 406 | 134 | 95 | 94 | 94 | 417 | 823 |
| 2 | 97 | 106 | 118 | 95 | 416 | 96 | 103 | 93 | 107 | 399 | 815 |
| 3 | 106 | 138 | 177 | 121 | 542 | 98 | 109 | 92 | 97 | 396 | 938 |
| 4 | 122 | 133 | 167 | 146 | 568 | 132 | 110 | 107 | 99 | 448 | 1016 |
| 5 | 220 | 149 | 132 | 95 | 596 | 155 | 148 | 105 | 80 | 488 | 1084 |
| 6 | 86 | 88 | 89 | 78 | 341 | 93 | 62 | 66 | 59 | 280 | 621 |
| 7 | 75 | 63 | 56 | 47 | 241 | 50 | 44 | 54 | 42 | 190 | 431 |
| 8 | 63 | 47 | 48 | 41 | 199 | 52 | 58 | 48 | 53 | 211 | 410 |
| 9 | 33 | 27 | 29 | 31 | 120 | 67 | 40 | 45 | 33 | 185 | 305 |
| 10 | 30 | 32 | 26 | 29 | 117 | 26 | 16 | 13 | 18 | 73 | 190 |
| 11 | 34 | 23 | 16 | 14 | 87 | 21 | 12 | 7 | 12 | 52 | 139 |
| TOTALS | | | | | 6392 | | | | | 5684 | 12076 |

AM PEAK HOUR IS 11:00 TO 12:00

| | | | | | |
|---|---|---|---|---|---|
| VOLUME | WEST : | 417 | EAST : | 402 | COMBINED: 819 |
| DIRECTIONAL SPLIT | | 51% | | 49% | |
| PEAK HOUR FACTOR | | 0.88 | | 0.90 | 0.93 |

PM PEAK HOUR IS 4:30 TO 5:30

| | | | | | |
|---|---|---|---|---|---|
| VOLUME | WEST : | 682 | EAST : | 509 | COMBINED: 1191 |
| DIRECTIONAL SPLIT | | 57% | | 43% | |
| PEAK HOUR FACTOR | | 0.77 | | 0.82 | 0.79 |

STATE OF OHIO · DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

# BRIDGE INSPECTION REPORT

-86 REV 01-77

| 3 | 1 | 3 | 8 | 0 | 8 | 9 |
|---|---|---|---|---|---|---|

RUCTURE FILE NUMBER 7

BRIDGE NUMBER HAM S0266 0212 MUNI= 3915 1478

CO ROUTE UNIT YEAR BUILT

08 111 1 15 TRIB EAST FORK MILL CREEK HAM

DISTRICT BRIDGE TYPE TYPE SERVICE

| | | TYPE | COND | | | TYPE | COND |
|---|---|---|---|---|---|---|---|
| CK<br>OOR (Over) | 1 8 | 1 | 3 | 2 WEARING SURFACE Patches at new utility castings slightly depressed | 2 56 | 2 | 2 |
| RBS & WALKWAYS | 10 | | | 4 MEDIAN | 58 | | |
| ILING (Over) | 5 12 | 5 | 3 | 6 DRAINAGE | 0 59 | 0 | 1 |
| PANSION JOINTS | 14 | | | 8. SUMMARY | 61 | | 4 |
| PERSTRUCTURE MAX.SPAN= 16<br>IGNMENT | 16 | | | TOT.LENGTH= 19<br>10 BEAMS or GIRDERS | 62 | | |
| APHRAGMS or CROSSFRAMES | 17 | | | 12 JOIST | 64 | | |
| LOOR BEAMS | 18 | | | 14 FLOOR BEAM CONNECTIONS | 65 | | |
| ERTICALS | 19 | | | 16 DIAGONALS | 66 | | |
| ND POST | 20 | | | 18 TOP CHORD | 67 | | |
| OWER CHORD | 21 | | | 20 LOWER LATERAL BRACING | 68 | | |
| P LATERAL BRACING | 22 | | | 22 SWAY BRACING | 69 | | |
| ORTALS | 23 | | | 24 BEARINGS | 70 | | |
| ICH | 24 | | | 26. ARCH COLUMNS or HANGERS | 72 | | |
| ANDRAL WALLS | 25 | | | 28 SUSPENSION SYSTEM | 73 | | |
| SPENDERS | 26 | | | 30 TOWERS | 74 | | |
| NT POST | 27 | | | 32 ANCHORAGE | 75 | | |
| IDGE MACHINERY | 28 | | | 34 PAINT | 76 | | |
| VE LOAD RESPONSE | 29 | | | 36. SUMMARY | 79 | | |
| STRUCTURE Vert. & Horiz. cracks<br>UTMENTS in old portion of west abut. | MAT 2 | 3 | 2 | 38 ABUTMENT SEATS | 80 | | 1 |
| IERS= 0<br>ERS | 33 | | | 40. PIER SEATS | 81 | | |
| CKWALLS | 36 | | | SW Wingwall cracked at abut.<br>42 WINGWALLS Wingwall needed at NW corner | 82 | | 2 |
| NDERS & DOLPHINS | 37 | | | Dirt has overrun wall @<br>44. SUMMARY S.E. corner | 83 | | 5 |
| VERTS<br>NERAL | 38 | | | 46 ALIGNMENT | 84 | | |
| EADWALLS or END WALLS | 40 | | | 48. SUMMARY | 85 | | |
| NNEL<br>IGNMENT | 42 | 1 | | 50 PROTECTION | 1 86 | 1 | 1 |
| ATERWAY ADEQUACY | 43 | 1 | | 52. SUMMARY | 88 | | 8 |
| ROACHES BRDG.RD.WIDTH= 30.3<br>VEMENT | 2 | 2 | 1 | | | | 1 |

1. Thirty percent of bottom reinforcing exposed, twisted bars are exposed, some are 70 percent gone. Temperature steel expanding, some completely gone. Corrugated arch extension was added to north; arch not true. Efflorescence present from salt and water coming through deck. Heavy truck traffic.

5. North side has steel guardrail, wood posts need replacing; south side is concrete, slight deterioration.

APPLICATION YEAR: 1990

STATE OF OHIO

INFRASTRUCTURE BOND PROGRAM

DISTRICT 2, HAMILTON COUNTY

PROJECT APPLICATION

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Jurisdiction/Agency: City of Sharonville Population (1980): 13,500

Project Title : Kemper Road Bridge Replacement, East of Mosteller

Project Identification and Location: Hamilton County Bridge No. HAM-S0266-0212; located on Kemper Road, over a tributary to the East Fork of the Mill Creek approximately 300' east of Mosteller Road (See Location Map).

Type of Project: Rehabilitation _____ Replace X Betterment* _____

(Mark more than one box if there are expansion elements such as 2 lane bridge being replaced with a 4 lane bridge)

Explanation of Betterment Elements of Project*: _____

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Road __ Bridge X Flood Control System (Stormwater)___

Solid Waste Disposal Facilities ___ Waste Water Treatment Systems ___

Storm Water and Sanitary Collection Storage & Treatment Facilities ___

Water Supply Systems ___

Detailed Description of Project **: The existing bridge consists of a concrete box culvert 50' long x 16'-6" span x 5'-8" rise (original structure) with a 5' rise x 18' span corrugated metal arch extension on the north end. This project will consist of replacing the existing structure with a 3-sided pre-cast concrete bridge having a waterway opening of approximately 6'x26'. Wingwalls/headwalls will be installed at each end of the new bridge and approximately 100' of retaining wall will be needed at the south end. The outletting channel to the Mosteller Road bridge (approximately 200' west) will

be regraded to a larger typical section to accommodate the increased hydraulic capacity of the new bridge. Approximately the first 50' of the outletting channel will be concrete lined to facilitate the change in flow direction. The new bridge will be located about 120' west of the existing structure and installed on a skew to avoid impacting the truck turn around apron located immediately south of the existing outlet channel and to provide a better channel alignment with the Mosteller Road bridge.

Type of Issue 2 Funds: District 2 ____ Small Government ____

Water/Sewer Rotary ____ Emergency X

* See definition of Betterment attached.
** Attach additional sheets if necessary

1. Of the total infrastructure within the jurisdiction which is similar to the infrastructure of this project, what percentage can be classified as being poor to very poor in condition, adequacy and/or serviceability.

   Typical examples are:

   Road percentage = $\frac{\text{Miles of road that are poor to very poor}}{\text{Total mileage of road within jurisdiction}}$

   Storm percentage = $\frac{\text{Length of storm sewers that are poor to very poor}}{\text{Total length of storm sewer within jurisdiction}}$

   Bridge percentage = $\frac{\text{Number of bridges that are poor to very poor}}{\text{Number of bridge within jurisdiction}}$

   Number of bridges that are poor to very poor = 4

   Total number of bridges = 15

   Bridge Percentage = 27% poor to very poor

2. What is the condition of the infrastructure to be replaced or repaired? For bridges, base condition on latest general appraisal and condition rating.

| | | | |
|---|---|---|---|
| Closed | _____ | Fair to Poor | _____ |
| Extremely Poor | X | Fair | _____ |
| Poor | _____ | Good | _____ |

Give a brief description of the nature of the deficiency of the present facility such as: inadequate load capacity (bridge), surface type and width, grades, curves, sight distances, drainage structures, sanitary sewers, and water mains. List the age of the infrastructure to be repaired or replaced using one of the following categories: less than 20 years, 20-29 years, 30-39 years, 40-49 years, 50 years or older

The primary deficiency of this structure is its advanced and rapidly accelerating state of deterioration. The original concrete section of the structure is 75 years old and is classified as a simple span concrete slab bridge. The top slab of this structure has severe losses of both concrete and primary steel reinforcement in large areas of the critical center portion of the span. Concrete has spalled to depths of 4"-6" in many areas throughout the top slab leaving the reinforcement steel completely exposed and hanging free. Reinforcement was found to have section losses of greater than 50% in many areas, as reported in the 1988 Bridge Inspection Report, prepared by the Hamilton County Bridge Enigneer. In all, about 30% of the bottom reinforcing steel in the top slab is exposed. The bridge has has a current rating of 4A.

The bridges secondary deficiency is its insufficient hydraulic capacity. A total of 1843 acres (2.9 sq. miles), producing a peak runoff of 1300 cubic feet per second (CFS) on a 50 year storm is tributary to this structure. In contrast, the capacity of the existing bridge is approximately 500 CFS, or 38% of the capacity required. This inadequacy results in periodic (one or two times per year) overflowing of Kemper Road during periods of heavy rainfall.

3. If State Issue 2 funds are awarded, how soon (in weeks or months) after completion of the agreement with OPWC would the opening of bids occur?
14 Weeks

Please indicate the current status of the project development by circling the appropriate answers below.

a) Has the Consultant been selected? . . . . . Yes No N/A

b) Preliminary development or engineering completed? Yes No N/A

c) Detailed construction plans completed?. . . . . Yes No N/A

d) All right-of-way acquired?. . . . . Yes No N/A

e) Utility coordination completed? . . . . . Yes No N/A

Give estimate of time, in weeks or months, to complete any item above not yet completed. Preliminary Engineering and detailed construction plans 10 weeks; utility coordination to be accomplished during the engineering phase.

4. How will the proposed infrastructure activity impact the general health, welfare, and safety of the service area.

Where applicable, comment on the following:

The area of Sharonville surrounding the subject bridge is zoned for uses that rely heavily on truck transportation; general industrial and industrial truck center. The weight limit reduction proposed, would cause these industries to incur increased operating costs due to detours as described in Item D below.

a.) Overall safety, including accident reduction (Accident records should be attached, if available). The existing bridge has not been the cause of any accidents. However, due to its deteriorated condition and the possibility of collapse under heavy truck traffic, Hamilton County will be reducing the bridges weight limit to 10 tons. Replacement of the structure will re-open this important truck route without the possibility of a serious accident resulting from a bridge collapse.

b) Emergency vehicle response time (fire, police & medical) Kemper Road is a major east-west route through Sharonville. A 10-ton weight limit on this bridge will require fire trucks to take an alternate route through downtown Sharonville to areas west of Mosteller Road. This represents approximately 2.0 miles and several minutes of additional travel.

c) Other factors (i.e., fire protection, health hazards, etc.) See Item B above.

d) Additional User Costs - The additional distance and time for the users to travel a detour or an alternate route The shortest detour available for trucks traveling Kemper Road will be: Mosteller to Commerce Boulevard, to Enterprise Drive, to Scarlet Oak Vocational School drive, to Kemper Road or vice-versa. Approximately 0.6 additional miles. This would not be a viable route for two (2) reasons.

1. The volume of traffic on Moseller Road at Commerce Blvd. (19,964 ADT) will make turning left from Commerce Blvd. very difficult especially at peak hours.

2. The Scarlet Oaks Vocational School drive is a private drive and although it is used by the general public, is not a public right-of-way.

The other two (2) most logical detours are:

1. Mosteller Road to I-275, to U.S. 42, to Kemper Road; or

2. Mosteller Road to Sharon Road, to U.S. 42, to Kemper Road.

These routes represent additional travel of 1.8 and 2.0 miles respectively. The number of trucks over 10 tons currently using the bridge has not been determined. However, the total number of trucks from 1988 traffic counts is estimated at 850 per day.

e) When project is complete, how will it impact adjacent businesses? The completed project will have no direct impact on adjacent businesses. However, it will alleviate the extra travel time and operating costs, that the load limit will impose on the area trucking companies.

5. Are matching funds available? (i.e. Federal, State, MRF, Local, etc.)
Yes; MRF

To what extent of anticipated construction cost? 20%

List the type and amount of funds being supplied by the local agency. This amount may be from local, Federal, State, Municipal Road Fund (MRF), or other sources. Explain additional funding through other sources being applied for or received for the project. Also, explain any need to accumulate funds for construction at a later date. Complete LOCAL FUNDING SOURCES on Page 6.

The local agency shall supply a minimum of 10% of the anticipated construction cost. Additionally, the local agency shall pay for all costs of engineering, inspection of construction, right-of-way, and betterment portion of the project. Complete ESTIMATED COST OF PROJECT. on Page 6.

6. Has any formal action by a federal, state or local government agency resulted in a partial ban or complete ban of the use of expansion of use for the involved infrastructure?

Are there any roads or streets within the proposed project limits that have weight limits (partial ban) or truck restrictions (complete ban)? Have any bridges had weight limits imposed on them (partial ban) or truck prohibitions (complete ban)? Have the issuance of new Building permits been limited (partial ban) or halted (complete ban) because the existing storm/sanitary sewer or water supply system in a particular area is inadequate? Document with specific information explaining what type of ban currently exists and the agency that imposed the ban. A recent (Feb 1990) inspection by the Hamilton County bridge Engineer revealed the original concrete section of this structure to be deteriorating rapidly. Due to its increasingly poor condition, the County will reduce the weight limit on the bridge to 10 tons, effective March 13, 1990

7. What is the total number of existing users that will benefit as a result of the proposed project? Use appropriate criteria such as households, traffic counts, ridership figures for public transit, daily users, etc., and equate to an equal measurement of users.

For roads and bridges, multiply current documented Average Daily Traffic by 1.2 occupants per car (I.T.E. estimated conversion factor) to determine users per day. Ridership figures for public transit must be documented. Where the facility currently has any restrictions or is partially closed, use documented traffic counts prior to restriction. For storm sewers, sanitary sewers, water lines, and other related facilities, multiply the number of households in the service area by four (4) to determine the approximate number of users per day. ADT = 12076 VPD

12076 x 1.2 = 14,490 daily users

8. The applicant has conducted a study of its existing capital improvements and their condition. A five year overall Capital Improvement Plan (that shall be updated annually) is attached or on file with the District 2 Integrating Committee for the current year or shall be submitted by March 31 of the program year. The Plan shall include the following:

   a) An inventory of existing capital improvements, including their condition.

   b) A plan that details capital improvements needs during the next five years and,

   c) A list of the political subdivision's priorities in addressing these needs.

   The attached Form 1 shall be completed for those projects which are being submitted for Issue 2 funds.

9. Is the infrastructure to be improved part of a facility that has regional significance? (Number of jurisdictions served, size of service area, trip lengths or lengths of route, functional classifications) Yes; Kemper Road is a major east-west route crossing nearly the entire width of northern Hamilton County. In the area of the subject bridge, it is a vital link between the Cities of Sharonville and Springdale. The trucks that will be most affected will be those which use the Mosteller Road/I-275 interchange to access the section of Kemper Road, east of Mosteller and west of Rt. 42

10. ESTIMATED COST OF PROJECT

| ACTIVITY | ISSUE 2 FUNDS | LOCAL FUNDS |
|---|---|---|
| Planning, Design, Engineering | (100% Local) | $ 33,200 |
| Right-Of-Way/Real Property | (100% Local) | $ N-A |
| Inspection of Construction | (100% Local) | $ 5,000 |
| Construction and Contingencies | $ 195,600 | $ 48,900 |
| Betterment Portion | (100% Local) | $ N-A |
| SUBTOTAL | $ 195,600 | $ 87,100 ** |

Grand Total (Issue 2 Funds Plus Local Funds) . . . . . $ 282,700

LOCAL FUNDING SOURCES

| | |
|---|---|
| Municipal Road Fund (MRF) | $ 48,900 |
| State Fuel & License Funds | $ |
| Local Road Taxes | $ |
| Local Bond or Operating Funds | $ |
| Misc. Funds (Specify) Capital Fund | $ 38,200 |
| TOTAL LOCAL FUNDS | $ 87,100 ** |

** These numbers must be identical

## CAPITAL IMPROVEMENT PLAN

### LOCAL ABILITY TO PAY

A. Previous Capital Budget for Infrastructure Projects*

Budget is based on expenditures or appropriations?* (Circle One)

| Funding (in thousands of dollars) | % of TOTAL expenditures/ appropriations | % of TOTAL Capital budget USED FOR INFRASTRUCTURE REPAIR/REPLACEMENT |
|---|---|---|
| 1986 $ 900 | 50 % | 76 % |
| 1987 $2,934 | 50 % | 28 % |
| 1988 $2,563 | 50 % | 54 % |
| 1989 $3,167 | 50 % | 46 % |

B. Projected Capital Budget for Infrastructure Projects*

Budget is based on expenditures or appropriations?* (Circle One)

| Funding (in thousands of dollars) | % of TOTAL expenditures/ appropriations | % of TOTAL Capital budget USED FOR INFRASTRUCTURE REPAIR/REPLACEMENT |
|---|---|---|
| 1990 $2,400 | 50 % | 50 % |
| 1991 $2,385 | 50 % | 50 % |
| 1992 $2,850 | 50 % | 60 % |

* Use only funds expended or appropriated for construction CONTRACTS.

Briefly explain any significant Reduction (10% or more) in projected expenditures or appropriations for 1989-92 as compared to actual expenditures or appropriations for previous years. (It is the intent of Issue 2 to SUPPLEMENT local capital funds, not REPLACE them.) _____

Does the jurisdiction utilize any of the following methods for funding sources? (circle answer)

| | | |
|---|---|---|
| Local income tax..... | Yes | No |
| Permissive license plate fee..... | Yes | No |
| Bridge and road levies..... | Yes | No |
| Tax increment financing and/or..... capital improvement bond issues | Yes | No |
| Direct user fees..... | Yes | No |
| Permit fees and fines..... | Yes | No |

13.) AUTHORIZATION

The applicant hereby affirms that local funds will be provided if this project is selected.

Note: Attach with application any photographs, reports, plans or other available data on the project.

City of Sharonville

Signature

10900 Reading Road

Rex E. Baysore
Name

Sharonville, Ohio 45241
Address

Safety-Service Director
Position

(513) 563-1144
Phone (Work)

City of Sharonville, Ohio
Local Jurisdiction/Agency

APPLYING JURISDICTION/AGENCIES:

NOTE THAT THIS FORM IS BEING OFFERED FOR INFORMATION PURPOSES ONLY. IT WILL BE FILLED OUT BY THE SUPPORT STAFF, BASED ON INFORMATION SUPPLIED ON APPLICATION FORMS.

**DISTRICT 2 - HAMILTON COUNTY**

**1990 PROJECT RATING FORM AND SELECTION CRITERIA**

**FOR**

**STATE ISSUE 2 DISTRICT ALLOCATION**

**STATE ISSUE 2 SMALL GOVERNMENT FUNDS**

**LOCAL TRANSPORTATION IMPROVEMENT PROGRAM**

JURISDICTION/AGENCY: City of Harrison

PROJECT IDENTIFICATION:

Kemper Road Bridge B-0212 located 300' east of Mosteller Road.

PROPOSED FUNDING:

ELIGIBLE CATEGORY:

Bridge.

**POINTS**

10 1. Type of Project

10 points - Bridge, road, storm water.
3 points - All other type projects.

10 2. If Issue 2 Funds are awarded, how soon after the agreement with OPWC is completed would bids occur?

10 points - Will be let in 1990
5 points - Likely to be let in 1990
0 points - Not likely to be let in 1990

8 3. What is the condition and/or serviceability of the infrastructure to be replaced or repaired. For bridges, base condition on latest general appraisal and condition rating.

10 points - Closed
8 points - Extremely Poor
6 points - Poor
4 points - Fair to Poor
2 points - Fair
0 points - Good

4 4. Of the total infrastructure within the jurisdiction which is similar to the infrastructure of this project, what portion can be classified as being in poor condition, and/or inadequate in service.

10 points - 50% and over
8 points - 40% and over
6 points - 30% and over
4 points - 20% and over
2 points - 10% and over

10 5. How important is the project to the health, welfare and safety of the public and the citizens of the district and/or the service area?

10 points - Significant importance
8 points -
6 points - Moderate importance
4 points -
2 points - Minimal importance

4 6. What is the overall economic health of the jurisdiction?

10 points - Poor
8 points -
6 points - Fair
4 points -
2 points - Excellent

1. 7. Are matching funds for this project available? (i.e., Federal, State, MRF, Local, etc.). To what extent of estimated construction cost?

10 points - More than 50%
8 points - 40-50% and over
6 points - 30-49% and over
4 points - 20-29% and over
2 points - 10-19% and over

5 8. Has any formal action by a Federal, State or local governmental agency resulted in a partial or complete ban of the use or expansion of use for the involved infrastructure? This includes reduced weight limits on bridges.

10 points - Complete ban
5 points - Partial ban
0 points - No action

5 9. What is the total number of existing users that will benefit as a result of the proposed project. Use appropriate criteria such as households, traffic count, public transit, daily users, etc. and equate to an equal measurement of persons.

5 points - Over 10,000
4 points - Over 7,500 to 9,999
3 points - Over 5,000 to 7,499
2 points - Over 2,500 to 4,999
1 points - Under 2,449

5 10. Does the infrastructure have regional impact? (May consider size of service area, trip length or total length of route, number of jurisdictions, functional classification, etc.)

5 points - Major impact
4 points -
3 points - Moderate impact
2 points -
1 points - Minimal impact

65 **TOTAL POINTS**

Steve Mary
Joe Kupfer
Reviewer Names

3/13/90
Date